

Antibiotic Resistance Competition 2019

Farm to Fork – Antibiotic Resistance in Agriculture

IRREVERSIBLE MISTAKES

by

Tay Jun Yi Joshua

St. Joseph's Institution 38 Malcolm Road Singapore 208374 "Members of the jury, on your left, the prosecution from the American AgriSafety Alliance. To your right, the CEO of AgriFoods US Company, Stanley Burkman as our defendant," announced the judge as both parties took turns to stand in acknowledgement of their positions in court. Stanley Burkman then took his seat as his hands started pressing on the creases his black suit had, in a bid to compress them hopelessly to no avail. No matter what he did, the thumping in his chest only seemed to swell in both magnitude and frequency. After weeks of prolonged court hearings, the verdict was finally to be made today.

Burkman already knew what was to come.

In the previous court sessions, Burkman's AgriFoods US Company had been accused of breaching Food and Drug Administration (FDA) laws, specifically the restriction on the use of fluoroquinolones, which was only allowed upon prescription to sick livestock by veterinarians. This was a newly-passed law, following growing global awareness on the crisis of superbugs. That was not the only restriction law the company had been accused of violating. Forensic evidence also pointed to AgriFoods US dosing its livestock on low quantities of other types of antibiotics, such as Avoparcin, an antibiotic which promoted growth in livestock, in the feed and drink. The usage of such antibiotics was said to be authorized by Burkman himself.

In defence, AgriFoods US presented their case, asserting that the use of these fluoroquinolones was to reduce the risk of illness among livestock altogether, which would increase food safety when its products reach its consumers. "Salmonella, a bacteria which in the past has claimed hundreds and thousands of lives," Burkman stated, "would then be eradicated by the time our meat reaches dinner plates, providing our customers with a peace of mind when purchasing products from our brand." Feeding its livestock with low-dosage antibiotics would also boost meat production rates to cope with high demand, stated Burkman as he highlighted AgriFood US's respectable reputation in the global market. In a convincing stand,

Burkman declared that though the company had violated FDA laws, the actions were an "essential evil" and that AgriFood US had always engaged in responsible practices.

However, last week came the turning point. Word came around that a fifty-two-year-old man from Florida had experienced severe diarrhoea, vomiting and fever. Less than seventy-two hours after the man had been hospitalised, he was pronounced dead in Twin Cities Hospital. Before his death, doctors had given him doses of Ampicillin and Chloramphenicol antibiotics, which were of no success in relieving his symptoms. Ciprofloxacin, a fluoroquinolone, was then prescribed to the man as a last-resort drug¹. And yet, he still died. Only one day after, the same story rose, this time from a young girl in Spain and by the end of the week, there were close to a hundred people from all over the world experiencing the exact same symptoms. All the patients had in thing in common—they had consumed beef products from AgriFood US a few hours prior. The word was out: fluoroquinolone-resistant Salmonallae, a superbug classified under 'High Priority' in the World Health Organisation's list of superbugs², could be found in AgriFoods US products.

In response to this, Burkman arranged for a press conference, announcing that the company was deeply apologetic for causing despair and discomfort to the lives of those affected and assured consumers that such incidents were only blips on the radar. Despite this, Burkman was staunch in his position that the use of antibiotics in cultivating livestock was not the main cause of these mishaps even with all the facts staring him straight in the eye. After all, Burkman had the entire agriculture industry backing him.

However, in his deepest conscience, he knew it was all bloody wrong.

Burkman glanced at his gold-plated watch to tell the time. Or was it to check how much time he had left? Burkman wasn't sure anymore. Taking another glance at his surroundings, he saw them. He noticed the panel of lawmakers and scientists staring at him as he glanced around. He felt an intense rage of judgement from the judge and prosecution. At the time, Stanley Burkman, CEO of AgriFoods US saw the

¹ (2016, June 14). Antibiotics against severe salmonella infections in Africa increasingly ineffective. Retrieved from https://www.sciencedaily.com/releases/2016/06/160614114412.htm

² Branswell, H. (2017, February 27). WHO Releases List of World's Most Dangerous Superbugs. Retrieved from https://www.scientificamerican.com/article/who-releases-list-of-worlds-most-dangerous-superbugs/

world staring him down. He saw deaths, diseases, a world filled with corporate greed that lives were to be sacrificed for the sake of money. It was all around him. Burkman could not take anymore. He took heavier and quicker breaths. His sweat trickled down his neck. He could do this no more.

Forcing his legs to carry himself as he stood up, Burkman felt the weight of the world on him.

"I, Stanley Burkman, plead guilty." Those were his last words in court.

11/2/20

My name is Gabriella Chavez Nevarez. I am currently staying in the Gregorio Marañón Hospital in Madrid, writing on a hospital notebook the nurse passed to me. Why am I in the hospital? I don't feel so well. During the past few days, I have had trouble excreting my poop (shhh!) out and today, I am starting to have headaches. Last night, Mama was so scared when she saw me crying in the toilet that she rushed me to the hospital immediately. I could see in her eyes that she was about to cry too.

I can still remember last night vividly. After reaching the hospital, the doctor's brought me to a room where I am staying at now. They took my temperature, injected something into my right arm (until now it still hurts!), until I had to use the toilet to do my business. I can say, that business was a bad transaction that didn't go through smoothly. After that, I was given some medicine by Mama with some nurses around trying to persuade me to take the medicine but I took them like it was nobody's business.

Today, I woke up feeling an aching in my stomach and I needed to use the toilet again. Luckily, Mama was beside me and she helped me to the toilet. Right after, I was given a bowl of rice with bananas for lunch and a dose of the same medicine. I really do hope the medicine can reach my stomach to become digested soon because I can take this pain no more. As I am writing, I am grimacing in pain.

Signing off,

Gaby

12/2/20

Today, the illness is getting worse. I have developed fever and Mama said that my head is so hot that it could be used as a heater during December. My head, my stomach and my muscles are all acting up. The lady nurse for my room, Maria, told me that I had a bacterial infection named Salmonella. Whatever the name is, I really pray that things will get better.

Because my symptoms have become worse, the doctors have stopped the previous dose of medicine and have switched to another drug. So here I am taking more medicine.

Today, my poop is still watery and I feel like using the toilet all the time. It is just so terrible for anyone to be in my position. At the same time, my headaches have not subsided and my head feels heavier than ever. Mama says that as long I take my medicine, the bad illness will be gone eventually.

Although so many bad things have happened in the past few days, Mama recently reminded me that my ninth birthday is in two days time and I will definitely write on that day itself to update!

Hope I get better, Gaby The time now is three o'clock in the morning. Just when I thought my illness could not get any worse yesterday, it did today. I awoke from the rumbling of my stomach and a terrible fever of 43 degrees celsius. My condition is so bad that I cannot explain it. My whole body is trembling and I am afraid that cannot write further. When I was feeling a little better, Mama told me that it was because of the United States beef we ate last Friday which turned bad. I swear on my life that I will not eat steak again.

I am feeling something so bad I have never ever felt before that I cannot describe it. As I am writing this, there are tears streaming down my face and the doctors and nurses are trying to console me. I really have to go now. I hope Santa Maria can help me as I have been praying her rosary faithfully. I will write tomorrow on my birthday if I can.

Signing off,

Gaby